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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,471	11/19/2003	Seiji Kachi	NEC03P167-Mlc	3737
21254 7590 05/28/2008 MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817				
EXAMINER PHUONG, DAI				
ART UNIT 2617		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/715,471

Applicant(s)

KACHI, SEIJI

Examiner

DAI A. PHUONG

Art Unit

2617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-19 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Amendment

1. Applicant's arguments, filed 03/07/2008, with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Claims 7-19 have been added. Claims 1-19 are currently pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2-8 recite the limitation "a method" in line 1. There is insufficient antecedent basis for this limitation in the claim. It should be corrected as "the method". Appropriate correction is required.

Claims 4-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 7-9, 11-15 and 17 are rejected under 35 U.S.C. 102(c) as being anticipated by Lor et al. (Pub. No.: 20040068668).

Regarding claim 1, Lor et al. disclose a method of limiting communication access between wireless LAN terminals 120-129 of a wireless LAN 101 (see Fig. 1), comprising the steps of:

allocating different subnetwork addresses to respective wireless LAN terminals (Fig. 5 and Fig. 7, [0021], [0050], [0074] to [0075]. Lor et al. disclose that ach type of user may be granted different access rights, for example, to the entire corporate network or only a particular subnet, the Internet, to particular applications, and/or to particular network services);

setting default gateways of the respective wireless LAN terminals as a single access limiter ([0031]. Lor et al. disclose the Access Points, 111-115, are connected to the LAN via switches, 106 and 107. These switches, called Wireless LAN Switches, do not only perform Layer 2 switching, but also act as a wireless edge manager. They provide the additional functionalities like access control, firewall functions, traffic privacy and quality of service, network management, and load balancing);and

returning a communication packet between the wireless LAN terminals from said access limiter 106 (see Fig. 1) which is set as said default gateways ([0048]. Lor et al. disclose the WLAN Switch serves as the second line of defense, or the access control enforcer), for thereby providing an access limiting function to limit communication access between the wireless LAN([0055]. Lor et al. disclose access control policies may be based on application because some applications need more resources than other. For example, peer-to-peer-type file downloading and streaming video especially may not be welcome during work hours. Access can

be controlled at either the AP or the WLAN switch by inspecting the packet content. Packets from unwelcome traffic are thus discarded. In the case of all of these access control procedures, the access control is configured into the AP or WLAN Switch, via configuration scripts, command line interface or web-based console. In addition, Lor et al. disclose in paragraph 31 that the Access Points, 111-115, are connected to the LAN via switches, 106 and 107. These switches, called Wireless LAN Switches, do not only perform Layer 2 switching, but also act as a wireless edge manager. They provide the additional functionalities like access control, firewall functions, traffic privacy and quality of service, network management, and load balancing).

Regarding claim 7, this claim is rejected for the same reason as set forth in claim 2.

Regarding claim 8, Lor et al. disclose all limitations in claim 1. Further, Lor et al. disclose a method wherein providing the access limiting function to limit communication access between the wireless LAN terminals is done without modifying the existing wireless LAN access point ([0009]).

Regarding claim 9, Lor et al. disclose a wireless LAN system, comprising:
a wireless LAN access point 111-112 (see Fig. 1) configured to wirelessly associate with a plurality of wireless terminals 120-122 ([0031]. Lor et al. disclose the wireless devices typically are located at the edge of the network. The wireless devices, 120-129 are connected to the enterprise network via the Access Points, 111-115, which in turn are the edge devices of the wired LAN); and

an access limiter 106 configured to control communications between a first of the plurality of the wireless terminals and a second of the plurality of the wireless terminals, wherein the first wireless terminal and the second wireless terminal communicate through the

access limiter (fig. 1, [0031]. Lor et al. disclose the wireless devices, 120-129, as shown in FIG. 1, are connected to the enterprise network via the Access Points, 111-115, which in turn are the edge devices of the wired LAN. The Access Points, 111-115, are connected to the LAN via switches, 106 and 107. These switches, called Wireless LAN Switches, do not only perform Layer 2 switching, but also act as a wireless edge manager. They provide the additional functionalities like access control, firewall functions, traffic privacy and quality of service, network management, and load balancing).

Regarding claim 11, Lor et al. disclose all limitations in claim 9. Further, Lor et al. disclose a method wherein the access limiter 106 is configured as a default gateway for the plurality of wireless terminals ([0048]).

Regarding claim 12, Lor et al. disclose all limitations in claim 11. Further, Lor et al. disclose a method further comprising a wired terminal configured to associate with the access limiter ([0031]).

Regarding claim 13, Lor et al. disclose all limitations in claim 12. Further, Lor et al. disclose a method wherein the wireless access point receives an address resolution protocol request from the first wireless terminal and transmits the address resolution protocol request to the access limiter and to the second wireless terminal, and wherein the access limiter returns the request and the second wireless terminal drops the request ([0038] to [0077]).

Regarding claim 14 Lor et al. disclose all limitations in claim 9. Further, Lor et al. disclose a method wherein when the first wireless terminal transmits a packet intended for the second wireless terminal to the access limiter, the access limiter detects that the packet is intended for the second wireless terminal and drops the packet ([0055] and [0117] to [0134]).

Regarding claim 15, Lor et al. disclose all limitations in claim 9. Further, Lor et al. disclose a method wherein when the first wireless terminal transmits a packet intended for the second wireless terminal to the access limiter, the access limiter performs priority control over the packet among a plurality of received packets ([0012] and [0121] to [0128]).

Regarding claim 17, this claim is rejected for the same reason as set forth in claim 2.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-3, 10, 16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lor et al. (Pub. No.: 20040068668) in view of Whelan et al. (Pub. No.: 20040203593).

Regarding claim 2, Lor et al. disclose all limitations in claim 1. Further, Lor et al. disclose a method wherein said access limiter 106 (see Fig. 1) has two LAN interfaces connected respectively to a wired terminal 101 and the wireless LAN access point 111-112, said wireless LAN terminals 120-122 being connected to said wireless LAN access point 111-112, said access limiter 106 comprising:

an access limiting function for passing or dropping a received packet to thereby inhibit or permit communications between the terminals ([0031] and [0047] to [0055]);

a band limiting function for buffering a received packet to process audio packets with priority over other packets ([0055] and [0122]);

a routing function for distributing packets selectively to said wired terminal and said wireless LAN access point depending on a destination of the packets ([0124] and table 2 to table 3);

a server for allocating IP addresses having different subnets for the respective terminals in response to address requests from said wired LAN terminals (Fig. 5 and Fig. 7, [0021], , 0027], [0050], [0074] to [0075]); and

an ARP server installed in an existing IP protocol stack ([0077]).

However, Lor et al. do not disclose a DHCP server for allocating IP addresses having different subnets for the respective terminals in response to DHCP requests from said wired LAN terminals.

In the same field of endeavor, Whelan et al. disclose a DHCP server for allocating IP addresses having different subnets for the respective terminals in response to DHCP requests from said wired LAN terminals ([0088] to [0095]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the **mobile radio** of Lor et al. by specifically including a DHCP server for allocating IP addresses having different subnets for the respective terminals in response to DHCP requests from said wired LAN terminals, as taught by Whelan et al., the

motivation being in order to allocate IP address to the mobile unit which is associated with an access point.

Regarding claim 3, the combination of Lor et al. and Whelan et al. disclose all limitations in claim 2. Further, Whelan et al. disclose a method wherein when a first one of the wireless LAN terminals is turned on, said first wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; said wireless LAN access point, which operates as a simple bridge between a wireless LAN and a wired LAN, transfers the received DHCP request to the access limiter; said access limiter, which has a DHCP server function, returns a DHCP response to the DHCP request to said wireless LAN access point; and said wireless LAN access point, which has received the DHCP response, converts the DHCP response from wired data to wireless data, sends the DHCP response to said first wireless LAN terminal to allow said first wireless LAN terminal to make IP communications according to IP address information allocated from the DHCP server; wherein when a second one of the wireless LAN terminals is turned on, said second wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; said wireless LAN access point, which operates as the simple bridge between a wireless LAN and a wired LAN, transfers the received DHCP request to the access limiter; said access limiter, which has the DHCP server function, returns a DHCP response to the DHCP request to said wireless LAN access point; and said wireless LAN access point, which has received the DHCP response, converts the DHCP response from wired data to wireless data, sends the DHCP response to said second wireless LAN terminal to allow said second wireless LAN terminal to make IP communications according to IP address information allocated from the DHCP server; wherein

said first wireless LAN terminal sends a packet destined for said second wireless LAN terminal to said access limiter; and said access limiter transfers the received packet, which is destined for said second wireless LAN terminal, to said second wireless LAN terminal ([0088] to [0095]).

Regarding claim 10, Lor et al. disclose all limitations in claim 9. However, Lor et al. do not disclose the wireless LAN system further comprising a dynamic host configuration protocol configured to return a dynamic host protocol configuration request received from one of the plurality of wireless terminals, the returned dynamic protocol configuration request being a subnet different from subnets assigned to the other of each of the plurality of wireless terminals.

In the same field of endeavor, Whelan et al. disclose a dynamic host configuration protocol configured to return a dynamic host protocol configuration request received from one of the plurality of wireless terminals, the returned dynamic protocol configuration request being a subnet different from subnets assigned to the other of each of the plurality of wireless terminals ([0088] to [0095]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the **mobile radio** of Lor et al. by specifically including a dynamic host configuration protocol configured to return a dynamic host protocol configuration request received from one of the plurality of wireless terminals, the returned dynamic protocol configuration request being a subnet different from subnets assigned to the other of each of the plurality of wireless terminals, as taught by Whelan et al., the motivation being in order to allocate IP address to the mobile unit which is associated with an access point.

Regarding claim 16, Lor et al. disclose all limitations in claim 9. However, Lor et al. do not disclose the wireless LAN system further comprising a dynamic host protocol configuration server configured to allocate IP address having different subnets for respective wireless terminals that are wirelessly associated with the access point.

In the same field of endeavor, Whelan et al. disclose a dynamic host protocol configuration server configured to allocate IP address having different subnets for respective wireless terminals that are wirelessly associated with the access point ([0088] to [0095]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the **mobile radio** of Lor et al. by specifically including a dynamic host protocol configuration server configured to allocate IP address having different subnets for respective wireless terminals that are wirelessly associated with the access point, as taught by Whelan et al., the motivation being in order to allocate IP address to the mobile unit which is associated with an access point.

Regarding claim 18, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 19, this claim is rejected for the same reason as set forth in claim 7.

Allowable Subject Matter

8. Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, the prior art record does not disclose nor fairly suggest a method wherein when said first wireless LAN terminal is turned on, said first wireless LAN terminal

sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; since the DHCP request is a broadcast packet, said wireless LAN access point transfers the DHCP request to said access limiter on a wired LAN, and broadcasts the DHCP request to said second wireless LAN terminal; said access limiter, which has received the DHCP request, sets its own IP address to a predetermined value, and sends IP address information as a response to said first wireless LAN terminal; and said second wireless LAN terminal, which has received the DHCP request, drops the received packet as the DHCP server is not activated; wherein when said second wireless LAN terminal is turned on, said second wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; since the DHCP request is a broadcast packet, said wireless LAN access point transfers the DHCP request to said access limiter on the wired LAN, and broadcasts the DHCP request to said first wireless LAN terminal; said access limiter, which has received the DHCP request, sets its own IP address to a predetermined value, and sends IP address information as a response to said second wireless LAN terminal; and said first wireless LAN terminal, which has received the DHCP request, drops the received packet as the DHCP server is not activated; wherein when a packet is to be sent from said first wireless LAN terminal to said second wireless LAN terminal, since a subnet of said first wireless LAN terminal is different from a subnet of said second wireless LAN terminal, before said first wireless LAN terminal sends the packet to said access limiter set as said default gateways, said first wireless LAN terminal sends an ARP request to resolve a MAC address of said default gateways; said wireless LAN access point, which has received said ARP request, transfers the ARP request to said access limiter on the wired LAN and said second wireless LAN terminal; said access limiter which has a same address returns a

response to said ARP request, and said second wireless LAN terminal which has a different address drops the packet; since said first wireless LAN terminal has had the MAC address resolved by the ARP request, said first wireless LAN terminal sends a packet destined for said second wireless LAN terminal to said access limiter; and if said access limiter is to permit communications between the wireless LAN terminals, the access limiter returns the received packet and sends the received packet to said second wireless LAN terminal.

Regarding claim 5, the prior art record does not disclose nor fairly suggest a wherein when said first wireless LAN terminal is turned on, said first wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; since the DHCP request is a broadcast packet, said wireless LAN access point transfers the DHCP request to said access limiter on a wired LAN, and broadcasts the DHCP request to said second wireless LAN terminal; said access limiter, which has received the DHCP request, sets its own IP address to a predetermined value, and sends IP address information as a response to said first wireless LAN terminal; and said second wireless LAN terminal, which has received the DHCP request, drops the received packet as the DHCP server is not activated; wherein when said second wireless LAN terminal is turned on, said second wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; since the DHCP request is a broadcast packet, said wireless LAN access point transfers the DHCP request to said access limiter on the wired LAN, and broadcasts the DHCP request to said first wireless LAN terminal; said access limiter, which has received the DHCP request, sets its own IP address to a predetermined value, and sends IP address information as a response to said second wireless LAN terminal; and said first wireless LAN terminal, which has received the

DHCP request, drops the received packet as the DHCP server is not activated; wherein when a packet is to be sent from said first wireless LAN terminal to said second wireless LAN terminal, since a subnet of said first wireless LAN terminal is different from a subnet of said second wireless LAN terminal, before said first wireless LAN terminal sends the packet to said access limiter set as said default gateways, said first wireless LAN terminal sends an ARP request to resolve a MAC address of said default gateways; said wireless LAN access point, which has received said ARP request, transfers the ARP request to said access limiter on the wired LAN and said second wireless LAN terminal; said access limiter which has a same address returns a response to said ARP request, and said second wireless LAN terminal which has a different address drops the packet; since said first wireless LAN terminal has had the MAC address resolved by the ARP request, said first wireless LAN terminal sends a packet destined for said second wireless LAN terminal to said access limiter; and if said access limiter is to inhibit communications between the wireless LAN terminals, the access limiter drops the received packet.

Regarding claim 6, the prior art record does not disclose nor fairly suggest a wherein when said first wireless LAN terminal is turned on, said first wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; since the DHCP request is a broadcast packet, said wireless LAN access point transfers the DHCP request to said access limiter on a wired LAN, and broadcasts the DHCP request to said second wireless LAN terminal; said access limiter, which has received the DHCP request, sets its own IP address to a predetermined value, and sends IP address information as a response to said first wireless LAN terminal; and said second wireless LAN terminal, which has received the

DHCP request, drops the received packet as the DHCP server is not activated; wherein when said second wireless LAN terminal is turned on, said second wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; since the DHCP request is a broadcast packet, said wireless LAN access point transfers the DHCP request to said access limiter on the wired LAN, and broadcasts the DHCP request to said first wireless LAN terminal; said access limiter, which has received the DHCP request, sets its own IP address to a predetermined value, and sends IP address information as a response to said second wireless LAN terminal; and said first wireless LAN terminal, which has received the DHCP request, drops the received packet as the DHCP server is not activated; wherein when a packet is to be sent from said first wireless LAN terminal to said second wireless LAN terminal, since a subnet of said first wireless LAN terminal is different from a subnet of said second wireless LAN terminal, before said first wireless LAN terminal sends the packet to said access limiter set as said default gateways, said first wireless LAN terminal sends an ARP request to resolve a MAC address of said default gateways; said wireless LAN access point, which has received said ARP request, transfers the ARP request to said access limiter on the wired LAN and said second wireless LAN terminal; said access limiter which has a same address returns a response to said ARP request, and said second wireless LAN terminal which has a different address drops the packet; since said first wireless LAN terminal has had the MAC address resolved by the ARP request, said first wireless LAN terminal sends a packet destined for said second wireless LAN terminal to said access limiter; and if said access limiter is to buffer communications between the wireless LAN terminals, the access limiter performs priority control of the received packet depending on a property thereof.

Art Unit: 2617

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Duc can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Dai A Phuong/
Examiner, Art Unit 2617
Date: 05/14/2008

/Duc Nguyen/
Supervisory Patent Examiner, Art Unit 2617